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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,998	07/30/2001	Marco Steiger	G 3752	1503

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EXAMINER

MCDONALD, SHANTESE L

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,998

Applicant(s)

STEIGER ET AL.

Examiner

Shantese L. McDonald

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-11 and 13-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date 4/26/05
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,6-9,10,13-17,21 and 22

are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. in view of Miller.

Fletcher et al. teaches a tool for use with a manually operable material removal apparatus comprising a flat elongated member, 10, having a rearward first section, 12, provided with an aperture, 14,15,16, which allows the member to be mounted on an output shaft and a forward second section, 8, remote from the first section and including material removing cutting teeth, 2. Fletcher et al. also teaches that cutting teeth are formed by adjoining two straight cutting edge sections at acute angles, (fig. 2). Fletcher et al. also teaches a slot, 24, provided for facilitating removal of cut material, provided in the elongated member between the first and second sections. Fletcher teaches that the elongated member has a substantially constant width at least between the first and second sections, (fig. 1), and the member having a substantially trapeziform outline, (fig. 6a), and the elongated member comprising a third section, disposed between the first and second sections having a first width, at least one of the first and second sections having a second width different from the first width, (fig. 6a). Fletcher teaches all the

Art Unit: 3723

limitations of the claims except for the elongated member being configured with at least one elongated path that facilitates rearward movement, along the path, of material being cut from the workpiece by the cutting edge, as well as removal of the material being cut, and at least one cutting edge having a first and second end and the removal facilitating means comprising recessed portions at the ends of the at least one cutting edge intermediate the first and second sections, and the acute angle being between 1.4 and 4.6 and 1.5 and 2 degrees. Miller teaches elongated member being configured with at least one elongated path that facilitates rearward movement, along the path, of material being cut from the workpiece by the cutting edge, as well as removal of the material being cut, (31, 54), and at least one cutting edge having a first and second end and the removal facilitating means comprising recessed portions at the ends of the at least one cutting edge intermediate the first and second sections, (fig. 5B). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the invention of Fisher with the above listed limitations taught by Miller, in order to enhance the material cutting and material removal capabilities. It would have been further obvious to make the acute angle of Fletcher between 1.5 and 4.6 and 1.5 and 2 degrees, in order to vary the cutting angles, and since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. as modified by Miller, in further view of Arntz et al.

Fletcher et al. as modified by Miller teaches all the limitations of the claims except for the material removing elements comprising diamonds and corundum. Arntz et al. teaches material removing elements, 35, comprising diamonds and corundum, (col. 4, lines 55-56). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the material removing elements of Fletcher et al. as modified by Miller with diamonds and corundum, as taught by Arntz et al. in order to enhance the elements material removing capabilities, and to make them more durable.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. as modified by Miller, in further view of Nitz et al.

Fletcher et al. as modified by Miller teaches all the limitations of the claims except for the elongated section being provided with a step intermediate the first and second sections, the step having a predetermined height and further comprising a fastener arranged to attach the first section to the shaft and extending beyond the elongated member through a distance at least approximating the height. Nitz et al. teaches the above listed limitations, (fig. 10, col. 4, lines 66- col. 5, line 8). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to provide the tool of Fletcher et al. as modified by Miller with the above listed limitations, as taught by Nitz et al., in order to enhance the range of the tools cutting capabilities.

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. as modified by Miller in further view of Fisher.

Fletcher et al. as modified by Miller teaches all the limitations of the claims except for a tool kit containing a plurality of discrete tools having different parameters. Fisher et al. teaches a tool kit containing a plurality of discrete tools, (abstract, lines 8-9 and col. 1, lines 12-13). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the invention of Fletcher et al. as modified by Miller with a tool kit, as taught by Fisher, in order to vary the cutting capabilities based on the variation of the intended use.

Response to Arguments

Applicant's arguments filed 3/25/05 have been fully considered but they are not persuasive.

In regards to the claimed limitation of, "at least one elongated path that facilitates rearward movement, along the path of material being cut from the workpiece by the cutting edge as well as removal of the material being cut", the trough, 31 of Miller, is being considered to be elongated, as viewed in fig. 4. The trough, 31, is greater in length than in width. Slot, 54, can also be considered as an elongated path that extends between the first and second sections. Even though the reference states that the slot, 54, contributes to weight reduction, it is inherent that if the material that has been cut is carried away from the teeth by the trough, 31, then the material will then enter the opening 54, and thus be further carried away from the workpiece.

Art Unit: 3723

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shantese L. McDonald whose telephone number is (571) 272-4486. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



S.L.M.
June 24, 2005

Joseph J. Hail, III
Supervisory Patent Examiner
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